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The path which led from the village to Nariatan, the northwestern garden clearing, passed through the previously mentioned ceremonial clearing north of the village. A short distance beyond this point, a branch took off to the east and led to Waniwanitan, the northeastern and second largest clearing, which contained nine garden plots totaling approximately five acres. Each garden was tilled by a different man, but two men had plots in both Nariatan and Waniwanitan. The size of the average garden was one-half acre. There was no newly cleared land, and, in contrast to Nariatan which was still yielding, nearly all of the crop (mostly manioc) had either died or been harvested. Quain noticed that the soil in Nariatan had a gray tone, whereas that of Waniwanitan was reddish in hue. This difference in color was due to the ashes deposited by the more recent burning over of the former site.

Nariatan was a newer garden than Waniwanitan, and the former was planted to a variety of crops while the latter was nearly all in manioc. This is indicative of the common tropical forest slash and burn system whereby second year gardens are used only for manioc growing, and new areas in which the soil is still comparatively rich are used for other vegetables in addition to manioc. The Trumaí are unique, however, in that the garden clearing was divided into individually owned plots. Smaller individual gardens or large gardens cleared and cultivated collectively are the general rule in the rain forests of South America.

The three other clearings were small, and each contained one garden plot. One was one-quarter acre in size, while the other two each comprised one-half acre. These small gardens were connected with the village by separate paths and were closer to it than the two larger clearings. Anariatan, Nariatan and Waniwanitan were named after old village sites, but Quain knew of no abandoned locations from which the names Tan Toreake and Tandatake could have been derived.

Horticultural Techniques

It is difficult to assess the relative importance of horticulture, fishing and gathering in the subsistence economy of the Trumaí. At different times of the year each made the major contribution to the diet. Most garden products became available at about the middle of the rainy season, but manioc was dug up when needed throughout the year. Fish and manioc were staples the year-round, although fishing was poorer during the rains. Each was more important in the total diet than were the products of gathering. However, the subsistence of the Trumaí at certain times of the year, especially in the early part of the rainy season, would have been seriously threatened without the wild foods.

The agricultural cycle started in the early part of the dry season when the clearings needed for the next rainy season's gardens were made.

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249 Urucú is a plant bearing a pod, The
386 interior of which yields a red paint used in body painting and the decoration of artifacts.

244 Bitter manioc was by far the most important crop, while maize and
[243] sweet potatoes ranked second and third, respectively. Most of the crops were planted in the same three-to-four-week period, but the gardener usually planted manioc before the other vegetables. For this purpose, holes were dug at six to ten foot intervals wherever space between the charred logs permitted. A short trench was first dug with a hoe, and then, from the opposite side, an adjacent trench was dug. The loose earth from the second trench was piled into the first, in which the manioc was then planted. Each pair of trenches was made with about fifty hoe strokes.

244 Shoots for planting were obtained by cutting sections from the stalks
242 of old manioc plants. About ten shoots were planted in each hole by thrusting them at an angle into the loose earth. The gardener tried to plant the stems deeply so that the developing tubers would receive maximum moisture. Slipshod gardeners, however, often thrust them in lightly and heaped earth around the stems. The shoots were inserted at slightly different angles to minimize the tangle of stems and thus facilitate the harvesting, but all shoots pointed in a general westerly direction. Quain was told that if they were planted otherwise, the wind would break the growing stalks.

243 The procedure for planting maize was somewhat simpler. The gardener brought a large container of seed corn and a jug of water to the area to be planted. He soaked some of the kernels, and then put them in a small gourd which he carried with him. Small holes, three to four inches deep, were dug with a digging stick (*mica*) or knife blade in the open spaces between the manioc holes. Into each hole three or four kernels were dropped. A small pile of the loose earth that had just been dug up remained next to the depression in which the corn was planted. This served to trap the early rains. The digging stick and knife were the only implements used in maize planting, whereas only the hoe was used to plant manioc.

244 Men planted manioc; the women were said by the men to "not know
462 how." Indicative of the importance of manioc, the word for planting refers only to manioc planting. Thus, a man who told Quain that he had finished his planting went to his garden the next day to put in sweet potatoes. Similarly, Quain was told that women do not "plant." He soon
[241] learned, however, that women could plant other crops, but, with the exception of cotton, it was always done under the supervision of the men.

The most active horticultural role of the women was harvesting. The
[483] wife of the gardener went to his plot to dig up manioc and pick vegetables, which she carried back to the village in a basketry container balanced on her head. If the gardener had no wife, the female relative in his household who prepared his food brought in his crop.

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were the teams always the same. Old Matiwana and his son Yatí fished together most of the time, as did Aloari and his true brother Tun. Other true brothers often fished together, but, with the exception of the two above-mentioned steadfast teams, men chose their fishing companions according to their mutual needs or plans for the day. Since such agreements occurred most often between members of the same household, co-residents often cooperated. One man, Jakuma, spent much of his time fishing as the *tau* of different canoe owners or borrowers. He had no wife, and his garden, which he did not till very diligently, was very small. His fishing partners included men from every household, who were related to him in various degrees.

Although the position of *tau* was a temporarily subordinate one, it caused no loss of status. Even the Trumaí chief, since he owned no canoe, went fishing as a *tau*. Occasionally men took their wives along, but fishing was a man's specialty, and the woman's function was restricted to paddling.

Gathering

The two most important food products that the Trumaí gathered were turtle eggs and the fruit of the *piquí* tree, or *tsinon*. Throughout the dry season, turtle eggs were gathered in great quantity on the banks and sandbars of the rivers. By September they were no longer available and, in the following month, *piquí* became the main objective of the gathering parties. The harvest of this fruit was stored and lasted nearly to the end of the rainy season. *Piquí* was an important staple, especially in the period before crops ripened. Most of the *piquí* trees grow wild, but there is a suggestion in Quain's notes that they might also have been transplanted when young. All of the *piquí* trees were individually owned, and proprietary rights of individuals to groups of trees were clearly understood by all. In order to make the fruit ripen fast, the owner of the trees built a slow-burning fire of grass underneath them at night. The early rainy season was a rather lean period, so that there was great joy when the *piquí* was heard falling in the forest. Everyone broke into shouts of "*kaha kaha kaha-a-a*," which was the conventional cry for greeting the first *piquí*. These shouts were slightly different from those welcoming fish brought into the village.

The first fruit was usually gathered by the owner of the trees and his family. However, when the fruit began to fall in great quantity there was a general harvest which was shared without regard for tree ownership.

Piquí gathering started in the middle of October, when the planting season had ended and the men were free to help in the gathering. However, men still fished frequently, and the burden of the gathering fell on the women and older boys. Women from the same household